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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/836,903

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Markku Verkama

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7798

32294

7590

01/28/2005

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EXAMINER

GREY, CHRISTOPHER

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/836,903	VERKAMA, MARKKU	
	Examiner	Art Unit	
	Christopher P Grey	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 5, 7, 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qureshi (WO 9727713) in view of Kreppel (US 6574201)

Claim 1 Qureshi discloses a combined service control point (SCP) and home location register (HLR) that is used as a database for storing subscriber identity, location information and other data (Page 10 lines 1-10). Qureshi also discloses the SCP component accessing the HLR component (Page 12 lines 17-28). Qureshi discloses a service management application system (server) connected to the HLR/SCP (Page 13 line 20- Page 14 lines 6). Qureshi also discloses the SCP accessing information (PDP address) from the HLR for routing (Page 18 lines 9-23). Qureshi does not specifically disclose a PDP address, however the background information (page 1 of specification) of the prior art discloses the mapping between a mobile station identity and PDP address via an HLR. Qureshi does not disclose connecting all support nodes to the intelligent network node.

Kreppel discloses SGSN and GGSN connected to a service control function (SCF) as shown in fig 3.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the teachings of Qureshi, who discloses the combined functionality of an HLR and a SCP, with the teachings of Kreppel, who discloses the interconnection of a number of support nodes to an intelligent network node. The motivation for this combination is to make directly available the location and identification of a mobile unit (Col 1 line 64- Col 2 line 23).

Claim 2 Qureshi discloses a combined functional unit for an HLR and SCP, but does not specifically disclose sending to the SCP an inquiry requesting a PDP address, responding to the inquiry by sending a PDP address to the server, and initiating the server to communicate with the mobile terminal using the PDP address.

Kreppel discloses a request being sent from a node to the HLR, and the HLR responding by sending subscription data (PDP address) to the node. Furthermore, Kreppel discloses the node sending a message to the mobile station (Col 7 lines 59- Col 8 lines 19 and see fig 3).

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the combined (HLR and SCP) unit disclosed by Qureshi with the request and response procedure disclosed by Kreppel. The motivation is the same as that for claim 1.

Claim 4 Qureshi discloses an HLR/SCP database containing subscriber information (Page 10 lines 1-10). One skilled in the art can appreciate subscriber information as server information (address). Qureshi does not disclose the SCP sending

the PDP address to the server and the server communicating with the mobile terminal without a separate inquiry.

Kreppel discloses the HLR responding by sending subscription data (PDP address) to the node. Furthermore, Kreppel discloses the node sending a message to the mobile station (Col 7 lines 59- Col 8 lines 19 and see fig 3). One skilled in the art can appreciate the node as a storage/database unit, capable of storing routing information gathered from the SCP, therefore not requiring an inquiry.

The motivation is the same as that for claim 1

Claim 5 Qureshi discloses a combined service control point (SCP) and home location register (HLR) that is used as a database for storing subscriber identity, location information and other data (Page 10 lines 1-10). The motivation is to provide the necessary information to route incoming calls (Page 10 lines 1-10).

Claim 7 Qureshi does not disclose the step of informing the intelligent network node being performed by a serving GPRS support node having SSP functionality.

Kreppel discloses a SGSN having service switching functionality (SSF) sending a message to a service control (IN node) function (Col 5 lines 22-30 and see fig 3). The motivation is to perform monitoring of the relationship between the SSF and SCP (Col 5 lines 25-30).

Claim 8 Qureshi discloses a subscriber communicating with a cellular radio network (page 10 lines 11-28).

Claim 17 Qureshi discloses the combined functionality of a service control point and a home location register in one functional unit, that coordinates the existing cellular

subscriber services and new intelligent network derived services (Page 5 lines 18-27).

Qureshi does not disclose an element other than the mobile station initiating the transfer of information.

Kreppel discloses a service switching function that is initiated to report an event (new service) as disclosed in Col 5 lines 9-13.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the teachings of Qureshi, who discloses the combined functionality of an HLR and a SCP, with the teachings of Kreppel, who discloses the reporting of an event. The motivation for this combination is to make directly available the location and identification of a mobile unit (Col 1 line 64- Col 2 line 23).

3. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Qureshi (WO 9727713) in view of Kreppel (US 6574201) in further view of Shah et al. (US 6018737)

Claim 3 The combined teachings of Qureshi and Kreppel discloses a combined functional unit for an HLR and SCP, and a request being sent from a node to the HLR. The combined teachings do not specifically disclose the intelligent network node sending information to the mobile terminal without disclosing the PDP address to the server.

Shah et al (Shah 'hereinafter') discloses a telephone number (identifier) being sent to a service control point that translates that number to a destination number

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(protocol address) and the call is completed to the service subscriber containing that translated address (Col 1 line 61- Col 2 line 6).

It would have been obvious to modify the combined teaching of Qureshi and Kreppel with the request and response procedure disclosed by Shah in order to allow a service subscriber to be reached with one telephone number regardless of his/her present location (Col 1 lines 56-60).

4. Claims 6, 9, 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qureshi (WO 9727713) in view of Kreppel (US 6574201) in further view of Gransberg et al (US 6128503).

Claim 6 The combined teachings of Qureshi and Kreppel do not disclose the step of informing the intelligent network node being responsive to a detected establishment and/or change in the PDP address.

Granseberg et al (Gransberg 'hereinafter') discloses a service control point receiving an IN trigger/detection point to this detection (Col 6 lines 31-47). The motivation to modify the combined teachings of Qureshi and Kreppel with the teachings of Gransberg is in order to coordinate a number of different services to a subscriber (see abstract).

Claim 9 Qureshi discloses a combined service control point (SCP) and home location register (HLR) that is used as a database for storing subscriber identity, location information and other data (Page 10 lines 1-10). Qureshi also discloses the SCP component accessing the HLR component (Page 12 lines 17-28). Qureshi

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discloses a service management application system (server) connected to the HLR/SCP (Page 13 line 20- Page 14 lines 6). Qureshi also discloses the SCP accessing information (PDP address) from the HLR for routing (Page 18 lines 9-23). Qureshi does not specifically disclose a PDP address, however the background information (page 1 of specification) of the prior art discloses the mapping between a mobile station identity and PDP address via an HLR. Qureshi does not disclose a plurality of nodes.

Kreppel discloses SGSN and GGSN connected to a service control function (SCF) as shown in fig 3, however the combined teachings of Qureshi and Kreppel do not disclose transferring information such as new service to a mobile terminal

Gransberg discloses a service control point receiving an IN trigger/detection point, where one skilled in the art can appreciate this point being triggered from a change or creation of service (Col 6 lines 31-47). Kreppel discloses SGSN and GGSN connected to a service control function (SCF) as shown in fig 3.

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the combined teachings of Qureshi and Kreppel to make directly available the location and identification of a mobile unit (Col 1 line 64- Col 2 line 23), with the teachings of Gransberg in order to coordinate a different services to a subscriber (see abstract).

Claim 10 Qureshi discloses a combined functional unit for an HLR and SCP, but does not specifically disclose sending to the SCP adapted to receive a second

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message, and responding to the second message by sending PDP address to the server.

Kreppel discloses a request (second message) being sent from a node (server) to the HLR, and the HLR responding by sending subscription data (PDP address) to the node (Col 7 lines 59- Col 8 lines 19 and see fig 3).

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the combined (HLR and SCP) unit disclosed by Qureshi with the request and response procedure disclosed by Kreppel. The motivation is the same as that for claim 9.

Claim 11 Qureshi discloses a combined functional unit for an HLR and SCP, but does not specifically disclose sending to the SCP adapted to receive a second message, and responding to the second message by sending information to the mobile terminal.

Kreppel discloses a request (second message) being sent from a node (server) to the HLR, and the HLR responding by sending subscription data (PDP address) to the node. Furthermore, Kreppel discloses the node sending a message to the mobile station (Col 7 lines 59- Col 8 lines 19 and see fig 3).

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the combined (HLR and SCP) unit disclosed by Qureshi with the request and response procedure disclosed by Kreppel. The motivation is the same as that for claim 9.

Claim 12 Qureshi discloses an HLR/SCP database containing subscriber information (Page 10 lines 1-10). One skilled in the art can appreciate subscriber information as server information (address). Qureshi does not disclose the SCP sending the PDP address to the server and the server communicating with the mobile terminal without a separate inquiry.

Kreppel discloses the HLR responding by sending subscription data (PDP address) to the node (server). Furthermore, Kreppel discloses the node sending a message to the mobile station (Col 7 lines 59- Col 8 lines 19 and see fig 3). The motivation is the same as that for claim 9

Claim 13 Qureshi discloses a combined service control point (SCP) and home location register (HLR) that is used as a database for storing subscriber identity, location information and other data (Page 10 lines 1-10). Qureshi also discloses the SCP component accessing the HLR component (Page 12 lines 17-28). Qureshi discloses a service management application system (server) connected to the HLR/SCP (Page 13 line 20- Page 14 lines 6). Qureshi also discloses the SCP accessing information (PDP address) from the HLR for routing (Page 18 lines 9-23). Qureshi does not specifically disclose a PDP address, however the background information (page 1 of specification) of the prior art discloses the mapping between a mobile station identity and PDP address via an HLR. Qureshi does not disclose providing new service information.

Gransberg discloses a service control point receiving an IN trigger/detection point, where one skilled in the art can appreciate this point being triggered from a change or creation of service (Col 6 lines 31-47).

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the teachings of Qureshi, who discloses the combined functionality of an HLR and a SCP, with the teachings of Gransberg, who discloses an IN service trigger point. The motivation for this combination is to make directly available the location and identification of a mobile unit (Col 1 line 64- Col 2 line 23) and furthermore make use of an IN service (Col 8 lines 1-11).

Claim 14 Qureshi discloses a combined functional unit for an HLR and SCP, but does not specifically disclose sending to the SCP an inquiry about the PDP address of the mobile terminal.

Gransberg discloses a request being sent from a node (server) to the HLR, and the HLR responding by sending subscription data (PDP address) to the node (Col 7 lines 59- Col 8 lines 19 and see fig 3).

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the combined (HLR and SCP) unit disclosed by Qureshi with the request and response procedure disclosed by Kreppel. The motivation is the same as that for claim 13.

Claim 15 Qureshi does not disclose sending the new service information to the SCP to be forwarded to the mobile terminal.

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Gransberg discloses a service control point receiving an IN trigger/detection point (new service or change thereof) to this detection (Col 6 lines 31-47). The motivation is the same as that for claim 13.

Claim 16 Qureshi disclose a combined functional unit for an HLR and SCP. The combined teachings do not specifically disclose a PDP address, however the background information (page 1 of specification) of the prior art discloses the mapping between a mobile station identity and PDP address via an HLR. Qureshi does not disclose sending the new service information to the SCP to be forwarded to the mobile terminal.

Gransberg discloses a service control point receiving an IN trigger/detection point (new service or change thereof) to this detection (Col 6 lines 31-47).

The motivation for the modification of Qureshi's invention with the IN service trigger point disclosed by Gransberg is to coordinate the provision of supplementary services to mobile subscribers (Col 3 lines 7-9).

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(a) Becher (US 6545987) discloses a trigger event extending from a subscriber, requesting subscriber information for a service control point.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Grey whose telephone number is (571)272-3160. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571)272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Grey
Examiner
Art Unit 2667

C. Grey
1-24-05

Afsar Qureshi
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PRIMARY EXAMINER 1/24/05